

What is claimed is:

1 1. An attachment leg for a turbine fuel ring comprising:

2
3 a substantially flat first leg portion terminating at a first end, wherein the first
4 leg portion includes an opening for receiving a turbine component fastener;

5
6 a substantially flat second leg portion terminating at a second end configured
7 for connection to a turbine engine fuel ring, wherein the first and second leg portions
8 are substantially parallel; and

9
10 a transition portion between the first and second leg portions offsetting the
11 first leg portion from the second leg portion, the transition portion being located
12 closer to the first end of the attachment leg such that the second leg portion is longer
13 than the first leg portion.

1 2. The attachment leg of claim 1 wherein at least a portion of the second end is
2 generally c-shaped and extends substantially transversely from the second leg
3 portion.

1 3. The attachment leg of claim 1 wherein the first leg portion is not co-planar with
2 any portion of the second leg portion.

1 4. The attachment leg of claim 1 further comprising:

2
3 a countersunk washer having an inner side and an outer side; and

4
5 a bolt having a first end including a head portion and second end including a
6 shank portion,

7
8 wherein the attachment leg includes inward and outward faces, wherein the
9 outer side of the washer is positioned substantially adjacent to the inward face of the

10 first leg portion, wherein the shank portion of the bolt passes through the washer and
11 the opening in the first leg portion such that the first end of the bolt and the inner side
12 of the washer are substantially flush with the inward face of the second leg portion.

1 5. The attachment leg of claim 1 wherein the attachment leg is a single-piece
2 construction.

1 6. The attachment leg of claim 1 wherein the first portion is at least twice as thick
2 as the second portion.

1 7. The attachment leg of claim 1 wherein the transition portion comprises at least
2 one curve.

1 8. A fluid supply tube for a turbine fuel ring comprising:
2

3 a head portion having a generally round fluid inlet passage extending at least
4 partially therethrough; and
5

6 a duct portion substantially transversely extending from the head portion, the
7 duct portion including a elongated body and an outlet end portion, the duct portion
8 having a substantially rectangular passage extending longitudinally therethrough, the
9 rectangular passage of the duct portion and the round passage of the head portion
10 having substantially identical cross-sectional areas,
11

12 wherein the rectangular and round passages are disposed substantially
13 transverse to each other and in fluid communication.

1 9. The fluid supply tube of claim 8 wherein the outlet end portion angles away
2 from the elongated body.

1 10. The fluid supply tube of claim 9 wherein the outlet end portion angles from
2 about 20 degrees to about 25 degrees away from the elongated body.

1 11. The fluid supply tube of claim 8 wherein the fluid supply tube is a single piece
2 construction.

1 12. The fluid supply tube of claim 8 wherein the fluid supply tube is a two-piece
2 construction.

1 13. The fluid supply tube of claim 8 wherein the outlet end portion is adapted for
2 connection to a fuel distribution component and the head portion is adapted for
3 connection to a fuel supply.

1 14. A fuel distribution assembly comprising:
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3 a fuel distribution ring having a hollow interior and a plurality of apertures for
4 expelling a fluid;
5

6 at least one fluid supply tube attached to the fuel distribution ring, the fluid
7 supply tube including a head portion and a duct portion substantially transversely
8 extending from the head portion, the head portion having a round fluid inlet passage
9 extending at least partially therethrough, the duct portion including a elongated body
10 and an outlet end portion angling away from the elongated body, the duct portion
11 having a substantially rectangular passage extending longitudinally therethrough, the
12 rectangular passage of the duct portion and the round passage of the head portion
13 having substantially identical cross-sectional areas, wherein the rectangular and
14 round passages are disposed substantially transverse to each other and in fluid
15 communication with each other and with the hollow interior of the fuel distribution
16 ring;
17

18 one or more attachment legs connected to the fuel distribution ring, each
19 attachment leg including: (a) a substantially flat first leg portion terminating at a first
20 end and including an opening for receiving a turbine component fastener; (b) a
21 substantially flat second leg portion terminating at a second end configured for
22 connection to the fuel distribution ring, wherein the first and second leg portions are

23 substantially parallel, at least a portion of the second end is generally c-shaped and
24 extends substantially transversely from the second leg portion; and (c) a transition
25 portion between the first and second leg portions offsetting the first leg portion from
26 the second leg portion, the transition portion being located closer to the first end of
27 the attachment leg such that the second leg portion is longer than the first leg
28 portion.

1 15. The fuel distribution assembly of claim 14 wherein the assembly includes five
2 attachment legs and one fluid supply tube.

1 16. The fuel distribution assembly of claim 14 wherein the at least one fluid supply
2 tube and the one or more attachment legs extend substantially transversely from the
3 fuel distribution ring.

1 17. The fuel distribution assembly of claim 14 wherein the axis of the elongated
2 body of the duct portion of the fuel supply tube is offset radially outwardly of the
3 hollow interior of the fuel distribution ring.

1 18. The fuel distribution assembly of claim 14 further comprising:
2
3 at least one connector circumferentially surrounding a portion of the fuel
4 distribution ring, wherein the connectors provide a surface to which the c-shaped end
5 of the attachment legs are secured.

1 19. The fuel distribution assembly of claim 14 wherein the fuel distribution ring
2 further includes a t-connector for connecting the outlet end portion of the fuel supply
3 tube to the fuel distribution ring.